Appendix C – Green Building Design Measures

The following green building design measures may be utilized to implement the Guiding Principles Key Outcome #1 (Sustainability) as stated in the first Environment Goal:

"Protect the environment through energy and water conservation, alternative energy sources (e.g., solar), 'greenbuilding,' and other sustainability approaches."

Sustainability – Site Design; New single-family and multi-family residential development:
- Incorporate Passive Solar Design Plan subdivision lots and street layout to optimize solar access for all homes
- #1 – Environment: Protect wildlife corridors and other habitats where appropriate and beneficial.

Sustainability – Landscape and Engineering; New single-family and multi-family residential development:
- Create a biofilter, such as a swale, to slow the flow of stormwater into storm drains and allow pollutants to settle and decompose
- Plumb all new single-family and multi-family to include separate irrigation systems for landscape areas to make use of recycled water
- Apply Compost to Promote Healthy Topsoil
- Use Salvaged or Recycled-Content Materials for Landscape Elements

Sustainability – Building HVAC and Appliances; New single-family and multi-family residential development:
- Distribute Domestic Hot Water Efficiently Insulate Hot Water Pipes from Water Heater to Kitchen
- Insulate All Hot Water Pipes, or Insulate Pipes to Kitchen and Install On-Demand Hot Water Circulation System
- Use Engineered Parallel Piping
- Install High Efficiency Toilets (Toilets that use less than 1.3 gallons per flush (gpf) are called High-Efficiency Toilets (HETs). This category of fixture includes dual-flush toilets, 1.0-gpf pressure-assist toilets, and conventional gravity fed toilets.)
- Install ENERGY STAR® Appliances
- Install Separate Garage Exhaust Fan
- Design and Install HVAC System to ACCA Recommendations
- Install Sealed Combustion (Direct Vent) Furnaces and Water Heaters
- Install ENERGY STAR® Ceiling Fans with CFLs
- Install Ventilation System for Nighttime Cooling
- Install Air Conditioning with Non-HCFC Refrigerants
- Install High Efficiency HVAC Filter
- Install Zoned, Hydronic Radiant Heating with Slab Edge Insulation
- Install Tankless Water Heaters
- Install Water Heater with Energy Factor >0.62
- Install High Efficiency Furnace (AFUE 90 % or higher)
- Install High Efficiency Air Conditioner (SEER >13) with a Thermostatic Expansion Valve (TXV)

Sustainability – Building Architecture & Materials; New single-family and multi-family residential development:

- Design and Build ENERGY STAR® High Performance Homes
- Meet ENERGY STAR®'s Indoor Air Quality Package Requirements
- Install Solar Water Heating System
- Install Photovoltaic (PV) Panels on 25% of all new home construction
- Reduce solar heat gain through exterior surfaces by using light exterior colors or paints with reflective pigments
- Incorporate a minimum 30% Flyash in Concrete in foundation
- Apply Optimal Value Engineering (Advanced Framing)
- Use Engineered Lumber
- Use FSC-Certified Wood for Framing
- Use Oriented Strand Board (OSB) for Subfloor and Sheathing
- Reduce Pollution Entering the Home from the Garage - Tightly Seal the Air Barrier between Garage and Living Area
- Use Recycled-Content Decking (Avoid Virgin Plastic)
- Install Recycled-Content Insulation
- Install Insulation That Is Low Emitting for Formaldehyde and Volatile Organic Compounds (Certified Section 01350)
- Use Low-VOC or Zero-VOC Paint
- Use Low-VOC, Water-Based Wood Finishes
- Use Low-VOC Adhesives and Caulks
- Provide Permanent Walk-Off Mats and Shoe Storage at Home Entrances
- Use Rapidly Renewable Trim Materials
- Use Recycled-Content Materials
- Reduce Formaldehyde in Interior Finishes
- Use Rapidly Renewable Flooring Materials
- Use Recycled-Content Ceramic Tiles
- Use Flooring That Is Low-Emitting (Section 01350 or Green Label Plus

Sustainability – Construction Measures; New single-family and multi-family residential development:

- Protect Ducts during Construction and Clean All Ducts before Occupancy